

CLAIMS:

1. (Previously Presented) Inertial exciter for an acoustic radiator, the exciter comprising:
a magnet assembly;
a coupler adapted for attachment to a surface of the acoustic radiator and adapted for relative movement with respect to the magnet assembly;
a voice coil assembly attached to the coupler; and
a suspension attached to the coupler and the magnet assembly for supporting the magnet assembly adjacent the voice coil assembly relative to the coupler;
wherein the suspension lies substantially in a plane generally passing through the centre of mass of the magnet assembly, thereby reducing any moment acting on the suspension.
2. (Canceled)
3. (Canceled)
4. (Previously Presented) Inertial exciter according to claim 1, wherein the suspension is generally planar.
5. (Original) Inertial exciter according to claim 4, wherein the suspension is a spider formed from a corrugated foil of metal.
6. (Original) Inertial exciter according to claim 4, wherein the suspension is a spider formed of polymer.
7. (Original) Inertial exciter according to claim 4, wherein the suspension is a spider formed of strengthened cloth.
8. (Original) Inertial exciter according to claim 4, wherein the suspension is in the form of an arm type cantilever.
9. (Original) Inertial exciter according to claim 4, wherein the suspension is co-moulded or moulded integrally with the coupler.

10. (Original) Inertial exciter according to claim 8, further comprising a compliant member connected in mechanical series connection between a region of the coupler local to the voice coil assembly and regions of the coupler to which the suspension is attached.
11. (Original) Inertial exciter according to claim 10, wherein the compliant member has a lower compliance than the compliance of the suspension.
12. (Original) Inertial exciter according to claim 11, further comprising damping to control spurious resonances.
13. (Original) Inertial exciter according to claim 4, wherein the magnet assembly comprises a magnet sandwiched between a magnet cup and a pole piece, the cup defining a magnet gap which is filled with retentive fluid of suitable viscosity to damp motion of the voice coil.
14. (Original) Inertial exciter according to claim 4, wherein the suspension is attached to the coupler towards the periphery of the exciter to provide restoring forces to control residual unwanted asymmetric movement.
15. (Original) Inertial exciter according to claim 1, wherein the suspension is generally planar.
16. (Original) Inertial exciter according to claim 15, wherein the suspension is in the form of an arm type cantilever.
17. (Previously Presented) Inertial exciter according to claim 16, further comprising a compliant member connected in mechanical series connection between a region of the coupler local to the voice coil assembly and regions of the coupler to which the suspension is attached, the compliant member having a lower compliance than the compliance of the suspension.
18. (Original) Inertial exciter according to claim 1, wherein the suspension is attached to the coupler towards the periphery of the exciter to provide restoring forces to control residual unwanted asymmetric movement.

19. (Original) Inertial exciter assembly comprising an inertial exciter according to claim 1, a base plate for attachment to an acoustic radiator in a non-repeatedly engageable manner, and an exciter attached to said base plate in a repeatedly engageable manner.
20. (Original) Inertial exciter assembly according to claim 19, wherein said exciter is engageable with said base plate via a connection.
21. (Original) Inertial exciter assembly according to claim 20, wherein said connection is a threaded connection.
22. (Original) Inertial exciter assembly according to claim 20, and including a locking device for locking said connection.
23. (Original) Bending wave loudspeaker comprising an acoustic radiator and an inertial exciter according to claim 1, wherein said coupler is attached to the acoustic radiator.
24. (Canceled)
25. (Canceled)
26. (Previously Presented) Bending wave loudspeaker according to claim 23, wherein the suspension is generally planar.
27. (Previously Presented) Bending wave loudspeaker according to claim 23, wherein said coupler comprises a base plate, and said exciter is an inertial exciter.
28. (Original) Bending wave loudspeaker according to claim 27, wherein said exciter is engageable with said base plate via a releasable connection.
29. (Original) Bending wave loudspeaker according to claim 28, wherein said releasable connection is a threaded connection.
30. (Previously Presented) Bending wave loudspeaker according to claim 29, further comprising a locking device for locking said threaded connection.
31. (Canceled)

32. (Currently Amended): Loudspeaker exciter assembly according to ~~claim 34~~ claim 35, wherein said exciter is an inertial exciter.
33. (Canceled)
34. (Canceled)
35. (Currently Amended): A loudspeaker Loudspeaker exciter assembly for a bending wave loudspeaker, according to claim 34, further comprising:
a base plate configured to be mounted on the surface of a bending wave acoustic radiator in a non-repeatedly engageable manner;
an exciter attached to said base plate in a repeatedly engageable manner, wherein said exciter is engageable with said base plate via a releasable threaded connection; and
a locking device for locking said threaded connection.
36. (Canceled)
37. (Currently Amended): Loudspeaker exciter assembly according to ~~claim 34~~ claim 35, further comprising adhesive for attaching the base plate to an acoustic radiator in a non-repeatedly engageable manner.
38. (Canceled)
39. (Currently Amended) Bending wave loudspeaker according to ~~claim 38~~ claim 44, wherein the base plate is integral with the acoustic radiator.
40. (Currently Amended) Bending wave loudspeaker according to ~~claim 38~~ claim 44, wherein the base plate is adhesively bonded to the acoustic radiator.
41. (Currently Amended) Bending wave loudspeaker Loudspeaker exciter assembly according to ~~claim 38~~ claim 44, wherein said exciter is an inertial exciter.
42. (Canceled)
43. (Canceled)

44. (Currently Amended) ~~Loudspeaker-exciter assembly according to claim 43, further comprising~~ Bending wave loudspeaker comprising:

a bending wave acoustic radiator;

a base plate configured to be mounted on the surface of the acoustic radiator in a non-repeatedly engageable manner;

an exciter attached to said base plate in a repeatedly engageable manner, wherein said exciter is engageable with said base plate via a releasable threaded connection; and

a locking device for locking said threaded connection.

45. (Canceled)